



EXPLANATION

Mapped area of each unit described may contain minor areas of other units too small to represent at scale of map. Disinherited brackets indicate unconformity.

Unconsolidated sedimentary deposits
Alluvium, colluvium, and glacial deposits mapped by photogeologic methods; include some Holocene ash and lapilli.

Edgemoor Volcanism
Andesitic and basaltic flows, pyroclastic flows, and siliceous ash and lapilli erupted from several vents on Kruzof Island.

Lamprophyric basalt on Lisianski Inlet

Intrusive igneous rocks at Otter Bay, Baranof Island
Areas with abundant inclusions shown by stipple patterns.
Tm, hornblende-biotite gabbro with abundant inclusions of hornblende lamellae and masses of hornblende lamellae as much as 500 feet across.
Tmt, hornblende-biotite lamellae plain south of Otter Bay.

Intrusive igneous rocks on Baranof and Kruzof Islands
Areas with abundant inclusions and septa of metamorphic rock shown by stipple patterns.
Tt, hornblende-biotite tonalite, subvolcanic biotite tonalite and hornblende-biotite gabbro.
Ttg, hornblende-biotite gabbro and subvolcanic hornblende-biotite tonalite.
Ttg, hornblende-biotite tonalite and hornblende-biotite gabbro in subvolcanic cones.
Ttt, hornblende-biotite tonalite, subvolcanic hornblende-biotite gabbro, and garnet monzonite-biotite tonalite.

Intrusive igneous rocks on Chichagof and Yakobi Islands
Areas with abundant inclusions and septa of metamorphic rock shown by stipple patterns.
Tg, alkali granite northwest of Kruzof Bay.
Tg, biotite granite at Otter Bay and at Kruzof Bay.
Tg, hornblende-biotite tonalite of Lake Kruzof and biotite (?) hornblende tonalite in other basins on north Chichagof Island.
Tg, biotite monzonite tonalite southeast of Lisianski Inlet.
Tg, hornblende-biotite tonalite and hornblende-biotite gabbro at Otter Bay.
Tg, hornblende gabbro and hornblende diorite on Yakobi Island and at Davison Bay.
Tg, biotite hornblende tonalite on Yakobi Island and northwest Chichagof Island.
Tg, and Tg, map to govern than the other units listed here.

Intrusive igneous rocks near head of Tenakee Inlet, Chichagof Island
Hornblende monzonite, hornblende monzonite, and tonalite.

Artinofite-bearing gabbro on Baranof Island
Kad, Kgd, Kgt, Kt, Kd, Kgd, Kgt.

Intrusive igneous rocks on Chichagof and Yakobi Islands
Areas with abundant inclusions and septa of metamorphic rock shown by stipple patterns.
Kad, hornblende-biotite monzonite northeast of Freshwater Bay.
Kgd, biotite hornblende monzonite, hornblende-biotite gabbro, and biotite gabbro.
Kgt, biotite hornblende tonalite and hornblende tonalite.
Kt, hornblende diorite and biotite hornblende diorite.
K; hornblende gabbro and hornblende monzonite.

Ultramafic rocks on Baranof Island
Serpentine and partially serpentinized peridotite.

Sika Graywacke
Ks, graywacke and argillite, minor conglomerate and limestone.
Ksh, marlstone.
Ksh, hornblite in contact aureole.

Limestone and dolomite Sika Graywacke
Kls, limestone, and argillite, and semiconcretionary graywacke and shale derived from Kls unit by diagenetic metamorphism.
Kls, greenstone and greenstone lenses.

Intrusive igneous rocks on Chichagof and Baranof Islands
Jm, massive and schistose greenstone, amphibole schist, phyllite, and gneiss.
Jm, hornblende diorite, biotite hornblende monzonite, and hornblende monzonite of same body.
Jm, hornblende-biotite tonalite and hornblende-biotite diorite north and south of Ford Street, area of abundant inclusions shown by stipple patterns.
Jm, hornblende gabbro associated with unit Jm north of Ford Street.

Khas Formation
Greenstone, graywacke, greenstone, metachert, phyllite, and minor limestone.

Schist unit on northwest Chichagof Island
Jm, massive and schistose greenstone, amphibole schist, phyllite, and gneiss.
Jm, limestone.

Waterfall Greenstone
Tg, greenstone, amphibole schist, graywacke, greenstone, and chert.
Tg, marble on Kruzof Island.

Pinnacle Peak Phyllite
Thinly laminated siliceous phyllite.

Whitcomb Marble
Marble, some interstratified greenstone.

Good Dip Greenstone
Greenstone, volcanic breccia, greenstone, rare limestone.

Kelp Bay Group
Phyllite, quartzite, greenstone, greenstone, graywacke, and greenstone, amphibole schist, and argillite. Area characterized by intense cataclastic foliation shown by stipple patterns.
Jm, biotite schist and gneiss, some amphibolite, quartzite, phyllite, and hornblite, unit restricted to contact aureole of igneous complex centered at Warm Spring Bay, Baranof Island (Kruzof plain) and vicinity.

Schist, gneiss, amphibolite, and greenstone
Jm, amphibolite and greenstone, minor phyllite and schist, area characterized by intense cataclastic foliation shown by stipple patterns.

Amphibolite, gneiss, schist, and marble
Mh, amphibolite, gneiss, and marble.
Mh, marble.

Chert, limestone, sandstone, and greenstone
Thin-bedded chert with interstratified limestone at top, thin-bedded limestone in middle, sandstone and siltstone at base, change southward into chert and greenstone. Locally intruded by mafic sills.

Iyukeen Formation
Chert fossiliferous limestone of upper half, fossiliferous shale with minor limestone.

Freshwater Bay Formation
Andesite and basalt flows, volcanic breccia, tuff, minor graywacke, and limestone.

Cedar Cove Formation
Dc, Cedar Cove Formation, undivided.
Dc, limestone member of Late Devonian age at and northeast of Port Frederick.
Dc, chert member, composed of conglomerate, graywacke, argillite, and minor limestone.

Kemal Creek Limestone
Dsk, limestone, minor dolomite, limestone breccia, shale, and siltstone.
Dsk, conglomerate.

Point Augusta Formation
Sa, graywacke, argillite, minor conglomerate, siltstone, and limestone.
Sa, limestone and marble.

Intrusive igneous rocks
Ss, biotite granite and hornblende granite.
Ss, massive granite and biotite amphibole granite.
Ss, hornblende-biotite monzonite.
Ss, biotite monzonite, hornblende monzonite, hornblende monzonite, and biotite monzonite.

Geologic symbols and abbreviations
Contact, showing dip.
Fault, showing relative movement and dip.
Thrust (or reverse) fault, showing dip.
Mylonite in major fault zones.
Shooting trace of axial plane and plunge of axis.
Overtaken anticline.
Shooting trace of axial plane, direction of dip of limbs, and bearing and plunge of axis.
Shooting trace of axial plane.
Overtaken syncline.
Plunge of minor anticline.
Plunge of minor syncline.
Boundary of metamorphic aureole.
Fossil locality.
Trace of conspicuous marker bed.

RECONNAISSANCE GEOLOGIC MAP OF CHICHAGOF, BARANOF, AND KRUFZOF ISLANDS, SOUTHEASTERN ALASKA

